

CLAIMS

1. A power tool comprising:-
a housing;
a motor within the housing for actuating a working member of the tool, the motor having a stator and a rotor adapted to rotate about a first axis relative to said stator; and
resilient first vibration attenuating means acting between a working member of said tool and said housing for attenuating vibrations along three orthogonal axes transmitted from a working member of said tool to said housing.
2. A tool according to claim 1, wherein said first vibration attenuating means comprises a plurality of resilient members.
3. A tool according to claim 2, wherein said first vibration attenuating means acts between a bearing of said rotor and said housing.
4. A tool according to claim 2 or 3, further comprising a gearbox connected to said motor, wherein said first vibration attenuating means acts between said gearbox and said housing.
5. A tool according to claims 3 and 4, comprising a plurality of first said resilient members and a plurality of second said resilient members, wherein said first and second resilient members are circumferentially spaced about said first axis, and said first resilient members are circumferentially offset relative to said second resilient members.
6. A tool according to claim 5, wherein said first and second resilient members are arranged substantially perpendicularly to said first axis.
7. A tool according to any one of claims 2 to 6, further comprising at least one third said resilient member arranged substantially parallel to said first axis.

8. A tool according to any one of claims 2 to 7, wherein at least one said resilient member has adjustable resilience.
- 5 9. A tool according to claim 8, wherein at least one said resilient member comprises a respective spring acting against a respective abutment having adjustable position.
- 10 10. A tool according to any one of the preceding claims, further comprising second vibration attenuating means for attenuating vibrations transmitted from said stator to said housing in a direction substantially parallel to said first axis.
- 15 11. A tool according to claim 10, wherein the stator is displaceable relative to said housing in a direction substantially parallel to said first axis, and the second vibration attenuating means comprises biasing means for resisting said displacement of said stator relative to said housing at least in a direction substantially parallel to said first axis.
- 20 12. A tool according to claim 11, wherein the second vibration attenuating means acts between said stator and a support.
13. A tool according to claim 11 or 12, wherein said biasing means comprises at least one further resilient member.
- 25 14. A tool according to claim 13, wherein said biasing means comprises a plurality of first said further resilient members circumferentially spaced around said first axis and a plurality of second said further resilient members offset from said first further resilient members in a direction parallel to said first axis.
- 30 15. A tool according to claim 14, wherein said first further resilient members are circumferentially offset relative to said second further resilient members.
16. A tool according to according to any one of claims 13 to 15, wherein at least one said further resilient member comprises at least one respective leaf spring.

17. A tool according to any one of claims 13 to 16, wherein the resilience of at least one said further resilient member is adjustable.

5 18. A tool according to claims 16 and 17, wherein at least one said leaf spring has comprises a plurality of removable spring members.

19. A tool according to any one of claims 13 to 16, wherein the second vibration attenuating means comprises a plurality of interchangeable said further resilient members having different resiliencies.

10 20. A power tool substantially as hereinbefore described with reference to the accompanying drawings.